

METHOD FOR IMAGE REVERSAL OF IMPLANT RESIST USING A SINGLE PHOTOLITHOGRAPHY EXPOSURE AND STRUCTURES FORMED THEREBY

Abstract

A method for image reversal in semiconductor processing includes forming a first implant mask layer upon a semiconductor substrate and forming a patterned photoresist layer over the first implant mask layer. Portions of the first implant mask layer not covered by the patterned photoresist layer are removed so as to expose non-patterned portions of the substrate. The photoresist layer is then removed, and a second implant mask layer is formed over the non-patterned portions of the substrate, wherein the first implant mask layer has an etch selectivity with respect to the second implant mask layer. The remaining portions of the first implant mask layer are removed to expose a reverse image of the substrate, including initially patterned portions of the substrate.